

REMARKS/ARGUMENTS

Favorable reconsideration of this application is requested in view of the above amendments and in light of the following remarks and discussion.

Claims 1, 3-10, 12, and 15-18 are pending. Claims 1 and 7 are amended. Claims 17 and 18 are newly added. Claims 2 and 11 were canceled in a previous amendment. Claims 13 and 14 are canceled by the present amendment. Support for the amendment to Claim 1 can be found in Fig. 5, for example. Support for the amendment to Claim 7 can be found in Claim 1 and in Figs. 10A, 10B, 11A, and 11B, for example. Support for newly added Claim 17 can be found in Fig. 13, and numbered paragraph [0078] of the published application, for example. Support for newly added Claim 18 can be found in original Claim 2 and Figs. 5 and 7, for example. No new matter is added.

In the outstanding Office Action, Claims 1, 3-10, and 15-16 were rejected under 35 U.S.C. § 102(b) as anticipated by Ogawa (U.S. Patent No. 6,113,724, herein “Ogawa”). Claim 12 was rejected under 35 U.S.C. § 103(a) as obvious over Ogawa.

At the outset, Applicants note with appreciation the courtesy of a personal interview granted by Primary Examiner Chuong Luu to Applicants’ representative. In combination with the Interview Summary provided by Primary Examiner Luu, the substance of the personal interview is provided below in accordance with MPEP § 713.04.

Regarding the rejection of Claims 1, 3-10, and 15-16 as anticipated by Ogawa, that rejection is respectfully traversed by the present response.

Amended independent Claim 1 recites, in part

a heating plate for heating the mask substrate, the mask substrate disposed on a first side of the heating plate...  
heating means for heating the heating plate; and  
a frame member disposed on the first side of the heating plate so as to overlap the heating means as viewed from the first side, ... being detachably disposed to the heating plate so that the frame member is disposed around the mask substrate.

Accordingly, the frame member overlaps the heating means as viewed from the first side.

Additionally, the frame member is detachably disposed to the heating plate.

One benefit of the above-recited arrangement is that the frame member changes the heat transfer at the edge of the mask substrate so as to make heating of the mask substrate by the heating plate more uniform. In other words, by using the above-recited frame member, the edge of the mask substrate will not transfer heat differently to the same extent as it would if the frame member were absent.

Additionally, by making the frame member detachably disposed on the heating plate, the heating plate and frame member are easier to clean than when the frame member is permanently attached to the heating plate.

As discussed in the personal interview, Ogawa, as shown in Fig. 1, describes a frame body (6) disposed on a platen (2). The outstanding Office Action relies on the frame body (6) for the feature of a frame member as recited in independent Claim 1.<sup>1</sup> The outstanding Office Action relies on the melting means (3), provided inside the lower platen (2), for the feature of a heating means as recited in Claim 1.<sup>2</sup> As shown in Fig. 1, and discussed in the personal interview, the frame body (6) is not disposed on a side of the melting means (3) so as to **overlap** the melting means (3) when viewed from the first side. Rather, as shown in Fig. 1, the frame body (6) is disposed on the far left and far right sides of the platen (2). As discussed during the personal interview, the purpose of the frame body (6) in Ogawa is to form a seal with the o-ring (15) disposed in the top platen (1) as the top platen (1) is forced downward onto the frame body (6). As shown in Figs. 2-5, it is necessary for the frame body (6) to be disposed outside the area of the film body (4) so that the film body (4) can mold around the material (H1). Accordingly, Applicants respectfully submit that, not only does Ogawa fail to teach or suggest a frame member disposed on a first side of a heating plate so

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<sup>1</sup> Outstanding Office Action, page 2.

<sup>2</sup> Outstanding Office Action, page 2.

as to overlap the heating plate as viewed from the first side, but modifying Ogawa to include the above-noted feature would render Ogawa unsuitable for its intended purpose in that the film body (4) would be unable to deform around the material (H1) as is required in Ogawa for the lamination process described therein. Consequently, Applicants respectfully submit that amended independent Claim 1 and Claims 3-6, 10, 12, and 15-18 depending therefrom patentably distinguish over Ogawa for at least the reasons discussed above.

As further discussed in the personal interview, Claim 7 is rewritten in independent form and amended to recite a driving mechanism for moving a frame member so that a distance between the frame member and the side surface of the mask substrate varies in a direction perpendicular to the side surface.

One example of the apparatus recited in amended independent Claim 7 is shown in Figs. 10A, 10B, 11A, and 11B. In the illustrated example, the rod-shaped plates (71a-71d) move inward and outward relative to the periphery of the substrate. As discussed in the personal interview, the only movement described in Ogawa is of the first platen (1) relative to the second platen (2). The frame body (6), relied on in the outstanding Office Action for the feature of a frame member, does not move relative to the material (H1), upon which the outstanding Office Action appears to rely for the feature of a substrate. Rather, the frame body (6) is aligned with the exhaustion path (27) in order to allow depressurization of the space formed between the first platen (1) and the second platen (2) when the platens are sealed together against the frame body (6). Accordingly, as discussed in the personal interview Ogawa fails to teach or suggest an apparatus with a driving mechanism for moving a frame member so that a distance between the frame member and a side surface of a mask substrate placed on the heating plate varies in a direction perpendicular to the side surface of the mask substrate as recited in amended independent Claim 1. Consequently, amended

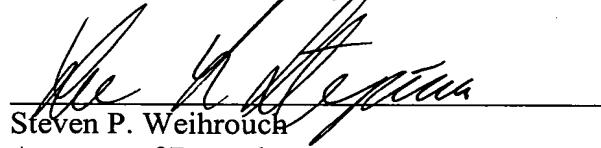
independent Claim 7 and Claims 8 and 9 depending therefrom patentably distinguish over Ogawa for at least the reasons discussed above.

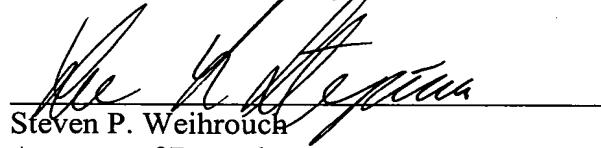
For the foregoing reasons, it is respectfully submitted that this application is now in condition for allowance. A Notice of Allowance for Claims 1, 3-10, 12, and 15-18 is earnestly solicited.

Should Examiner Luu deem that any further action is necessary to place this application in even better form for allowance, he is encouraged to contact Applicants' undersigned representative at the below-listed telephone number.

Respectfully submitted,

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